

Serial No. 10/781,786

Docket No.: 300.1145

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (CURRENTLY AMENDED) A semiconductor device, comprising:
 - a substrate body;
 - a plurality of external contact terminals formed of springy wires, ~~said external terminals arranged on and extending from said substrate body;~~
 - each of said external contact terminals having a base end connected to said substrate body and a tip end apart from said base end; and
 - each of said external contact terminals being plated, at least, ~~or on~~ on said tip end thereof, with a multiple-layered films which are removable by an etching treatment comprising a plurality of successively plated layers, including a first layer which can be dissolved by a first etching agent but is not reactive to a second etching agent, and a second layer which can be dissolved by the second etching agent but is not reactive to the first etching agent.
2. (CURRENTLY AMENDED) A semiconductor device as set forth in claim 1, wherein said springy wire is formed of gold, and said multiple-layered films comprises a nickel or nickel alloy film formed on the surface of the wire, and a gold film and a palladium film ~~alternately~~ formed in succession thereon.
3. (CURRENTLY AMENDED) A semiconductor device as set forth in claim 1, wherein said springy wire is formed of gold, and said multiple-layered films comprises a nickel or nickel alloy film formed on the surface of the wire, and a gold film and a indium film ~~alternately~~ formed in succession thereon.
4. (CURRENTLY AMENDED) A semiconductor device, comprising:
 - a substrate body;
 - a plurality of external contact terminals formed of springy wires, said external terminals arranged on and extending from said substrate body;
 - each of said external contact terminals having a base end connected to said substrate body and a tip end apart from said base end;

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an insulating resin layer formed on said substrate body in such a manner that at least a portion including said tip end, ~~is exposed~~ extending from said insulating resin layer is exposed; and

each of said external contact terminals being plated, in at least said exposed portion thereof, with a multiple-layered film which are removable by an etching treatment comprising a plurality of successively plated layers, including a first layer which can be dissolved by a first etching agent but is not reactive to a second etching agent, and a second layer which can be dissolved by the second etching agent but is not reactive to the first etching agent.

5. (CURRENTLY AMENDED) A semiconductor device as set forth in claim 4, wherein said springy wires is formed of gold, and said multiple-layered films comprise a nickel or nickel alloy formed on a surface of the wire, and a gold film and a palladium film ~~alternately~~ formed in succession thereon.

6. (CURRENTLY AMENDED) A semiconductor device as set forth in claim 4, wherein said springy wires is formed of gold, and said multiple-layered films comprises a nickel or nickel alloy formed on a surface of the wire, and a gold film and a indium film ~~alternately~~ formed in succession thereon.

7. (CURRENTLY AMENDED) A semiconductor device as set forth in claim 4, wherein said insulating resin is an elastomeric material, ~~such as silicone rubber.~~

8. (PREVIOUSLY PRESENTED) A method of using a semiconductor device, said device a substrate body; a plurality of external contact terminals formed of springy wires, said external terminals arranged on and extending from said substrate body; each of said external contact terminals having a base end connected to said substrate body and a tip end apart from said base end; and each of said external contact terminals being plated at least said tip end thereof with multiple films which are removable by an etching treatment; said method comprising:

removing said plated film by an etching treatment in accordance with a degree of contamination of the tip end; and

rinsing this semiconductor device to reuse the same.

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9. (NEW) A semiconductor device as set forth in claim 7, wherein said elastomeric material is silicone rubber.

10. (NEW) A method of using a semiconductor device comprising a substrate body, a plurality of external contact terminals formed of springy arranged on and extending from said substrate body, each of said external contact terminals having a base end connected to said substrate body and a tip end apart from said base end, and each of said external contact terminals being plated, at least on said tip end thereof, with a multiple-layered film which is selectively removable by an etching treatment; said method comprising:

selectively removing one or more layers of said multiple-layered, plated film by an etching treatment in accordance with a degree of contamination of the tip end; and
rinsing the semiconductor device subsequently to the etching treatment to enable reuse of the same.

11. (NEW) A method of using a semiconductor device as set forth in claim 8, wherein an outermost layer of the successively plated layer is dissolvable by a first etching agent but is not reactive to a second etching agent, and a next most outermost layer is dissolvable by the second etching agent but is not reactive to the first etching agent, and said selectively removing comprises:

using the first etching agent to remove the outermost layer.

12. (NEW) A method of using a semiconductor device as set forth in claim 10, wherein said selectively removing comprises:

when the first outermost layer has been selectively removed by the first etching agent, removing the next most outermost layer by using the second etching agent.

13. (NEW) A method of using a semiconductor device as set forth in claim 8, further comprising:

following selective removal of all of the successively plated layers, replating each of the plurality of external contact terminals with a multiple-layered film of selectively removable, multiple layers, by respective, first and second etching agents, for reuse of the semiconductor device and associated plurality of external contact terminals.